



PARTICIPANT

Is there any significant family history?

MODERATOR

No.

PARTICIPANT

What do you do for a living?

MODERATOR

The information you requested is not available - either because it was normal or not relevant to the case.

MODERATOR

You have gathered all the information that is required in the history. What examination would you like to perform for this patient?

PARTICIPANT

Okay. Thank you. Does the patient have any visual changes? BMI? BP? I would also like to perform a systemic examination as well.

MODERATOR

Enlargement of her jaw.  
Anterior open bite.  
BMI: 22.95  
BP normal.  
All other examinations are normal (CVD, cranial nerves - visual fields).

MODERATOR

Investigations	Results	Reference range
Calcium	2.65 mmol/L	2.10-2.60
Albumin	54 g/L	34-51
Total protein	84 g/L	60-80
ALP	71 U/L	35-105
Cortisol	99 nmol/L	Cortisol ref range 06:00-10:00: 172-497 nmol/L
Oestradiol	163 pmol/L	Fol: 98-571 Mid cycle: 176-1153 Lut: 122-1094
FSH	8.2 IU/L	Fol: 3.5-12.5 Lut: 1.7-7.7
LH	7.7 IU/L	Fol: 2.4-12.6 Luteal: 1-11.4
Prolactin	232 mU/L	100-500
17OH P	1.1 nmol/L	
Androstenedione	3.8 nmol/L	
Testosterone	0.7 nmol/L	< 1.9
SHBG	46.3 nmol/L	26.1-110.0
GH	2.42 ug/L	
IGF-1	41.9 nmol/l	9.5-32.0
TSH	1.87 mIU/L	0.4-4.5
FT4	20.2 pmol/L	10.0-22.0

PARTICIPANT

Thank you. There is an increase IGF-1 indicating acromegaly. I would like to confirm this by requesting a oral glucose tolerance test, please?

MODERATOR

OGTT results as below,

Minutes	Blood glucose (mmol/L)	Growth Hormone (nmol/L)
0	4.3	6.0
30	5.4	1.8
60	4.8	0.9
90	4.9	0.5
120	3.9	0.4

MODERATOR

MRI

Please summarise the MRI findings.

PARTICIPANT

Large pituitary tumour on the right with pressure on chiasm.

MODERATOR

You now have all the information required to make a diagnosis for this patient.

PARTICIPANT

Features suggestive of acromegaly with raised IGF-1 levels.  
With normal OGTT and MRI showing adenoma.  
Likely to suggest surgery if there are compression effects.

MODERATOR

Please write to the MDT:  
- Summary of your case.  
- State the diagnosis (and its rationale).  
-propose management plan

MODERATOR

**MDT**

Newly diagnosed acromegaly. GP/self-referral with acromegalic featrues.  
Pituitary adenoma.  
Size: 18mm x 15mm x 14mm  
Location: Predominantly right.  
Consistency: Cystic  
Cavernous sinus involvement: KNOSP grade 1 on the right  
Optic chiasm involvement: None  
Normal residual pituitary  
MDT outcome: Surgery

MODERATOR

**Operation note:**

This procedure (trans-sphenoidal) was completed successfully 6 weeks after her initial presentation.

MODERATOR

Please outline your post-op management plan until discharge and long-term follow-up for this patient.

PARTICIPANT

Okay, thank you. I would like to monitor IGF-1 and osmolalities post-operatively, and repeat MRI in 3 months to look for any residual disease.

MODERATOR

**The simuation has ended. Many thanks and the case will be discussed shortly.**